## Water Storage Ideas

In a disaster such as a hurricane, earthquake or flood, clean drinking water is often not available. According to the American Red Cross, every household should have an emergency preparedness kit. The most important item in the kit is water. The minimum amount to have available is one gallon per person per day, for drinking and sanitation. Keep a three-day supply on hand to take with you in case you must evacuate, and a two-week supply for your home.

## Plastic Bottles

- The Federal Emergency Management Agency (FEMA) suggests that you store water in clean plastic bottles such as plastic soft drink bottles. Bottle it yourself or buy commercially bottled water. Use plastic bottles that previously had juice or other beverages in them. Be sure you clean them thoroughly to insure there is no trace of the previous product (unless it was water) left in the bottle. Scald it and let the bottle dry upside down before filling it with clean water for storage. Cap tightly and store away from
 light. Do not use bottles that had anything other than food or beverage products in them. Rotate the water so that your supply stays fresh. How often you need to rotate it depends on your particular conditions, but every six months is a good rule of thumb (if just bleach is used for water treatment), more often if you live in a hot climate.


## Commercial Containers

- Emergency water supplies are available in commercially packaged and sterilized containers, usually either boxes or foil pouches. Because these products are packaged under sterile conditions, they generally have a shelf life of five years. Be sure you buy them from a reputable supplier. Most people find commercially packaged water too expensive to use for sanitation purposes, so also store water in bottles or barrels to supplement the sterile
 water. These are great to use in a 72-hr kit or Car Emergency Kit!


## Apartment Storage- Plastic bottles, Cans or Water blocks

https://www.foodstoragemoms.com/store-water-in-an-apartment-for-survival/
If you live in an apartment, it's more compact and stairs will be a problem if you have zero water stored, say on the second or third floor. I can't even imagine the sixth floor if the elevators are not working and you need to haul water up that many floors. Now, we could be talking about families, college students and maybe even some elderly people. Let's talk about what we need to do now, not next week or next month. We need to be prepared as soon as possible for the unexpected.

1. Plastic bottles- See plastic bottle section above. These can be recycled soda bottles or other hard plastic food-grade containers (juice bottles, etc.)
2. WaterBricks-available in two different sizes, but I recommend the larger 3.5gallon size for long-term storage. They stack like Lego's on top of each other. I
 put 16 WaterBricks (the 3.5-gallon size) under my queen bed, which equals 56 gallons of water. (Available on Amazon or other prepper websites)
3. Blue Cans-the water is hermetically sealed in aluminum cans and they are BPA FREE (most pricey option!). These cans have a 50 Year Shelf Life, 12 oz of water per can, 24 cans per case, 2.25 gallons of water per case, and

hermetically sealed water purified with 12 step filtration, reverse osmosis, and UV light treatment. (https://www.bluecanwater.com/ or on Amazon)

## Home Storage- Barrels

- For large families or people who would like to store larger quantities of water, use food-grade barrels. Buy these from online suppliers or purchase them locally. For large barrels, you can check farm supply stores or food manufacturers for used 40- or 55-gallon barrels that previously had food products such as juice concentrate in them. Clean and disinfect them thoroughly, then fill and store.

1. For short-term water storage, fill 55 -gallon drums with $1 / 4 \mathrm{c}$. unscented bleach and fill up. (Water stored this way will be good
 for only 6 months).

2. For long-term storage, use an "Aerobic Stabilized Oxygen" (ION or Aerobic 7 are some of the chemical brand names) water treatment solution, about 26 mL per 55 -gallon drum, and fill up. (Water stored with Aerobic Stabilized Oxygen will be good for 5 years before needing to empty and refill drums. See treatment chart below).

## Water Storage Chemical Chart- Ion or Aerobic 7 (Stabilized Oxygen)

| Storage Size <br> (gallons) | Amount of <br> Chemical <br> (drops) | Amount of <br> Chemical <br> $(\mathrm{mL})$ | Amount of <br> Chemical <br> (bottles of <br> Ion/Aerobic 7) |
| :---: | :---: | :---: | :---: |
| 5 | 100 | 2.3 | ------ |
| 8 | 160 | 3.8 | ----- |
| 55 | 1,100 | 25.8 | $1 / 2$ |
| 110 | 2,200 | 51.6 | 1 |
| 125 | 2,500 | 58.6 | $11 / 8$ |
| 250 | 5,000 | 117.2 | $21 / 4$ |
| 500 | 10,000 | 234.5 | $41 / 2$ |

## Water Storage Tips and Water Purification Websites

https://www.churchofjesuschrist.org/study/ensign/2006/08/random-sampler/emergency-waterstorage?lang=eng
http://www.reynoldsnet.org/preparedness/Water.html
https://beprepared.com/blogs/articles/water-in-an-emergency-part-1
https://www.cleverhiker.com/best-backpacking-water-filters
https://lifestraw.com/collections/emergency-
prep?gclid=Cj0KCQjw166aBhDEARIsAMEyZh4ZwtARj96rXiqAkXzmpD_70g01sGUnqapVeeRgE GSsPBqCZnWZeqwaAjd9EALw_wcB

## Purifying Water

- If water is polluted, strain through paper towels, paper coffee filters, or several layers of clean cloth into a container to remove any sediment or flaking material. Then boil the water vigorously for 10 minutes, as this will usually make it safe to drink. Add one additional minute for each 10,000 feet of altitude, depending on the area you live in.
- Another method of purification is to strain the water as described above, and then to chemically purify it by adding liquid bleach or tincture of iodine. Do not use granular forms of household bleach as they are poisonous.
- For clear water, use two drops of bleach or three drops of tincture of iodine per liter. If the water is cloudy, then these amounts should be doubled. Store an eye dropper with your emergency supplies, to be used only for this purpose.
- Mix thoroughly by stirring or shaking water in a container. Let the water stand for 30 minutes. A slight chlorine odor should be detectable. If not, then the dosage should be repeated and the water allowed to stand for an additional 15 minutes.
- Liquid bleach loses strength over time. For this reason, I mark each bleach container with the current date. If the bleach is one-year-old, double the amount. Two-year-old bleach should not be used.
- Water purification tablets will purify one liter of water. The tablets have a shelf life of two years and lose their effectiveness if them get damp. This is why I prefer Ion water purification which does not expire if container is not breached.
- Purify enough water to last a maximum of 48 hours. Water allowed to sit for longer than this may become re-contaminated.

